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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/037,584	10/23/2001	Micheal Kenneth Brown	401052-B-01-US(Brown)	6513
47523	7590	09/22/2005	EXAMINER	
JOHN C. MORAN, ATTORNEY, P.C. 4120 EAST 115 PLACE THORNTON, CO 80233-2623			SING, SIMON P	
			ART UNIT	PAPER NUMBER
			2645	
DATE MAILED: 09/22/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/037,584	BROWN ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Simon Sing	2645	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 July 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1, 8, 12 and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Penzias US 5,475,738.

1.1 Regarding claims 1 and 12, Penzias discloses a messaging system for delivering a voice message to a destination endpoint of a recipient. Penzias teaches:

receiving audio information from the destination endpoint (column 8, lines 39-57);  
concurrently analyzing using automatic speech recognition the received audio information for a first type (answered by a live person) and a second type (answered by an answering machine) of call classification (column 8, lines 39-57); and  
determining a call classification (answered by an answering machine (second type) or by a live person (first type)) for the destination endpoint based on analyzing (column 8, lines 39-57).

1.2 Regarding claim 8, Penzias discloses a messaging system for delivering a voice message to a destination endpoint of a recipient. Penzias teaches:

receiving audio information from the destination endpoint (column 8, lines 39-57);  
concurrently analyzing using automatic speech recognition the received audio information for words (a live person inherently answers a call with spoken words) and tones (answered by an answering machine) (column 8, lines 39-57; column 6, lines 29-35); and

determining a call classification (answered by an answering machine or by a live person) for the destination endpoint based on analyzing words and tones (column 8, lines 39-57).

1.3 Regarding claim 19, Penzias discloses a messaging delivering system (TTS 16) in figure 1, comprising:

an automatic speech recognizer for detecting first and second characteristics in audio information received from a called destination endpoint (column 8, lines 39-57);  
and

inference engine for classifying a call (answered by an answering machine or by a live person) in response to the automatic speech recognizer (column 8, lines 39-57).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

Art Unit: 2645

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Polcyn US 5,796,791.

2.1 Regarding claims 1 and 12, Polcyn discloses predictive dialer 110 in figure 1 for calling a destination endpoint of a target (called) party. Polcyn teaches:

receiving audio information from the destination endpoint, such as tones from answering machines and inherently words spoken by a live person (column 12, lines 55-67; column 13, lines 43-46); and

determining a call classification (answered by an answering machine (second type) or by a live person (first type)) (column 12, lines 55-67; column 13, lines 43-45).

Polcyn fails to explicitly teach using speech recognition to determine whether a call is answered by a live person or by an answering machine. However since Polcyn teaches that the predictive dialer 110 comprises a voice recognition unit (column 9, lines 9-13), and the predictive dialer 110 determines that whether a call is answered by a live person or by an answering machine (column 12, lines 55-67), therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Polcyn's reference, so that the voice recognition unit would have been utilized to determine a call classification by recognizing a tone generated by answering machine and spoken words from a live person, because such a modification would have clarified the teaching of Polcyn of how the predictive dialer determined a call classification.

2.2 Regarding claims 2 and 13, it is inherent that when a live person utters words when he/she answers a telephone call.

2.3 Regarding claims 4 and 15, as discussed above, the second types of classification is for tone (generated by telephone answering machines).

2.4 Regarding claim 8, Polcyn discloses predictive dialer 110 in figure 1 for calling a destination endpoint of a target (called) party. Polcyn teaches:

receiving audio information from the destination endpoint, such as tones from answering machines and inherently words spoken by a live person (column 12, lines 55-67; column 13, lines 43-46); and

determining a call classification based on tones and words (answered by an answering machine or by a live person) (column 12, lines 55-67; column 13, lines 43-45).

Polcyn fails to explicitly teach using speech recognition to determine whether a call is answered by a live person or by an answering machine. However since Polcyn teaches that the predictive dialer 110 comprises a voice recognition unit (column 9, lines 9-13), and the predictive dialer 110 determines that whether a call is answered by a live person or by an answering machine (column 12, lines 55-67), therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Polcyn's reference, so that the voice recognition unit would have been

utilized to determined a call classification by recognizing a tone generated by answering machine and spoken words from a live person, because such a modification would have clarified the teaching of Polcyn of how the predictive dialer determined a call classification.

2.5 Regarding claim 19, Polcyn discloses predictive dialer 110 in figure 1 for calling a destination endpoint of a target (called) party. Polcyn teaches:

receiving audio information from the destination endpoint, such as tones form answering machines and inherently words spoken by a live person (column 12, lines 55-67; column 13, lines 43-46); and

an inference engine (by inherency) for determining a call classification (answered by an answering machine or by a live person) (column 12, lines 55-67; column 13, lines 43-45).

Polcyn fails to explicitly teach using speech recognition to analyze the received audio information characteristics for determining whether a call is answered by a live person or by an answering machine. However since Polcyn teaches that the predictive dialer 110 comprises a voice recognition unit (column 9, lines 9-13), and the predictive dialer 110 determines that whether a call is answered by a live person or by an answering machine (column 12, lines 55-67), therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Polcyn's reference, so that the voice recognition unit would have been utilized to determined a call classification by recognizing a tone generated by answering machine and spoken

words from a live person, because such a modification would have clarified the teaching of Polcyn of how the predictive dialer determined a call classification.

2.6 Regarding claim 20, it is inherent that when a live person utters words when he/she answers a telephone call.

2.7 Regarding claim 22, as discussed above, the second characteristics is for tone (generated by telephone answering machines).

3. Claims 3, 14 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Polcyn US 5,796,791 in view of Hailwood et al US 20030069780.

The modified Polcyn reference teaches using a voice recognition unit for recognizing a tone generated by an answering machine and words spoken by a live person responding to a call, but fails to specifically teach recognizing words which formed phrases.

However, Hailwood discloses a system that includes a predictive dialer and a voice recognition unit (paragraph 43), such that the voice recognition unit recognizes spoken words and phrases (paragraph 45).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify the Polcyn's reference with the teaching of Hailwood, so that the voice recognition unit would have been enabled to recognized

phrases, because such a modification would clarified how to recognize a speech of the modified Polcyn reference.

4. Claims 5, 9, 16 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Polcyn US 5,796,791 in view of view of Colbbett et al. US 5,799,278.

The modified Polcyn reference, teaches recognizing tones and spoken words from the destination endpoint, but fails to teach a Hidden Markov Model (HMM) to determine the presence of words or tones.

However, Cobbett discloses a Hidden Markov Model, which is popular for speech recognition, to recognize a number of words (column 1, lines 16-24; column 7, lines 32-61).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify the Polcyn's reference with the teaching of Colbbett, so that a Hidden Markov Model (HMM) would have been used for performing voice recognition, because HMM was well know in the art, and using HMM for voice recognition would have been a matter of design choice.

5. Claims 6, 7, 10, 11, 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Polcyn US 5,796,791 in view of Colbbett et al. US 5,799,278 and further in view of Raman et al. US 5,842,165.

5.1 Regarding claims 6, 10 and 17, the modified Polcyn reference, teaches using Hidden Markov Model for voice recognition, but fails to teach using grammar and inference.

However, Raman discloses a method for speech recognition using the Hidden Markov Model (column 2, lines 21-26). Raman teaches using grammar rules (column 2, lines 27-47).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify the Polcyn's reference with the teaching of Raman, so that voice recognition would have used grammar rules, because using a grammar in voice recognition were well know in the art, and using such method would have been a matter of design choice.

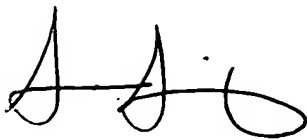
5.2 Regarding claims 7, 11 and 18, Polcyn's system inherently has an inference engine for determining call classification.

### ***Response to Arguments***

6. Applicant's arguments with respect to claims 1-23 have been considered but are moot in view of the new ground(s) of rejection.


**Conclusion**

7. Any inquiry concerning this communication or earlier communication from the examiner should be directed to Simon Sing whose telephone number is 571-272-7545. The examiner can normally be reached on Monday - Friday from 8:30 AM to 5:30 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fan Tsang, can be reached at 571-272-7547. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-2600.



S. Sing

09/12/2005



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